Title (en)
PRESERVATIVES FROM CHITIN DERIVATIVES

Title (de)
PRESERVATIVE AUS CHITINDERIVATEN

Title (fr)
CONSERVATEURS ISSUS DE DÉRIVÉS DE CHITINE

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Abstract (en)
[origin: WO2011004398A2] The invention comprises a process for producing a chitosan derivative, and a product prepared thereby, by activating chitosan or a chitosan precursor chitin in alcohol that contains water from 0% to maximum of about 30% and preparing derivatives by reacting with a reagent to get derivatives that have various uses including an antimicrobial, or a microbiostatic, or an antitranspirant, or an antifungal, or a fruit preservative properties or as carrier of active molecules or functional groups etc. or a combination thereof. Illustrated derivatives include acid, succinic, enzymatically deaceylated, enzymatically hydrolysed by chitinolysis, sugar, formaldehyde, phosphoric acid, hydrochloric acid and copper sulfate derivatives that are obtained by reaction individually or in a combination of consecutive reactions. A novel class of thermostable proteo-chitinase is also disclosed prepared from Aspergillus niger MTCC 5572 that has molecular weight on SDS PAGE of about 50 Kilo Daltons and optimum hydrolytic activity at pH 2 and 80 °C. Compositions for treatments of natural products and methods for retarding ageing, improvement of shelf life and retarding microbiological spoilage of banana and other fruits are also disclosed.

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